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Christopher J. Jackson

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EXAMINER

GELAGAY, SHEWAYE

ART UNIT

PAPER NUMBER

2137

MAIL DATE

DELIVERY MODE

09/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,497	Applicant(s) JACKSON, CHRISTOPHER J.	
	Examiner SHEWAYE GELAGAY	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed on June 5, 2008. Claims 1, 11-12, 22-23 and 29 have been amended. Claims 1-29 are pending.

Claim Rejections - 35 USC § 101

2. In view of the amendment filed May 16, 2005, the Examiner withdraws the rejection of claims 11, 22 and 29 under 35 U.S.C. 101.

Response to Arguments

3. Applicant's arguments filed June 5, 2008 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 11-12, 22-23 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 1, 11-12, 22-23 and 29 recite the limitation "the management class" in line 15. There is insufficient antecedent basis for this limitation in the claims.
7. Claims 1, 11-12, 22-23 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: The claims recite "determining whether the management communication

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is a first category management communication based on the management class or method in which the management communication is generated," however, the claims do not set forth what exactly the management class is and the method/process steps involved in generating the management communication.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al. (hereinafter Gai) US 2004/0160903 in view of Sailer et al. "History Based Distributed Filtering – A Tagging Approach to Network-Level Access Control" IEEE 2000, pages 373-382 (hereinafter Sailer) and in view of Chou et al. (hereinafter Chou) US 6,920,106.

As per claims 1, 11-12, 22-23 and 29:

Gai teaches an automated method of preventing an endnode in a communication fabric from receiving an unauthorized communication, comprising: establishing a first category of communications to include: a request from a manager node to an endnode; and a reply from the manager node to a request from an endnode;

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(page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 47-page 5, pp. 62; page 6, pp. 76-pp. 83) establishing a second category of communications to include: a reply from an endnode to a request from the manager node; and a request from an endnode to the manager node; (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 47-page 5, pp. 62; page 6, pp. 76-pp. 83) and at a switching device coupled to a first endnode: (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83) receiving from the communication fabric a communication addressed to the first endnode; (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83) determining whether the first endnode is a trusted endnode; (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113) and if the first endnode is not a trusted endnode, discarding the communication if the communication is not a first category communication. (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113)

Gai does not explicitly teach determining whether the management communication is a first category management communication based on the management class or method in which the management communication is generated. Sailer in analogous art, however, discloses determining whether the management communication is a first category management communication based on the management class or method in which the management communication is generated. (page 374, col. 1, pp. 1-4; page 375, col. 1, pp. 1-2 and col. 2, pp. 1-2; Section 3.1. Network-Level lattice model ; 5.1. Basic Modules) Therefore it would have been obvious to one ordinary skill in the art to modify the method disclosed by Gai with Sailer in order

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to provide a system with network level access control that applies to individual data packets that are exchanged between hosts or subnets. (Abstract; Sailer)

Both references do not explicitly disclose the communication is a management communication. Chou in analogous art, however, discloses a communication is a management communication. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14) Therefore it would have been obvious to one ordinary skill in the art to modify the method disclosed by Gai and Sailer with Chou in order to provide a system for processing of management packets that require additional resources and bandwidth in an efficient manner, thereby improving performance of the interconnect device. (col. 1, lines 60-63; Chou)

As per claims 2, 13 and 24:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Gai further teaches classifying each endnode in the communication fabric as either trusted or untrusted. (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113)

As per claims 3, 14 and 25:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches wherein said classifying comprises: associating with each port of the switching device an indicator configured to indicate whether a node coupled to the port is trusted. (page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113)

As per claims 4, 15 and 26:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches wherein said classifying comprises: classifying the first endnode as a trusted endnode if the first endnode is a manager node. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14)

As per claims 5, 16 and 27:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches wherein said classifying comprises: classifying the first endnode as an untrusted endnode if the first endnode is not configured to act as a manager node. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14)

As per claims 6 and 17:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Gai further teaches wherein said determining comprises: reading an indicator associated with a port of the switch to which the first endnode is coupled; wherein said indicator is configured to indicate whether the first endnode is trusted. ((page 1, pp. 9-11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113)

As per claims 7 and 18:

The combination of Chou and Beukema teaches all the subject matter as discussed above. In addition, Gai further teaches comprising, at the switching device: if the first endnode is trusted, forwarding the management communication to the first endnode regardless of the category of the management communication. (page 1, pp. 9-

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11; page 2, pp 12-13; page 4, pp. 44-page 5, pp. 62; page 6, pp. 76-pp. 83; page 8, pp.112-113)

As per claims 8 and 19:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches comprising, at the switching device: receiving a second management communication from the first endnode; and discarding the second management communication if the management communication is not a second category management communication. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14)

As per claims 9, 20 and 28:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches wherein the communication fabric comprises a subnet of an InfiniBand communication fabric. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14)

As per claims 10 and 21:

The combination of Gai, Sailer and Chou teaches all the subject matter as discussed above. In addition, Chou further teaches wherein a management communication comprises a communication transmitted on virtual lane 15 of the InfiniBand communication fabric. (col. 3, line 25-col. 4, line 36; col. 9, line 46-col. 10, line 14)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. G./
Examiner, Art Unit 2137

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2137